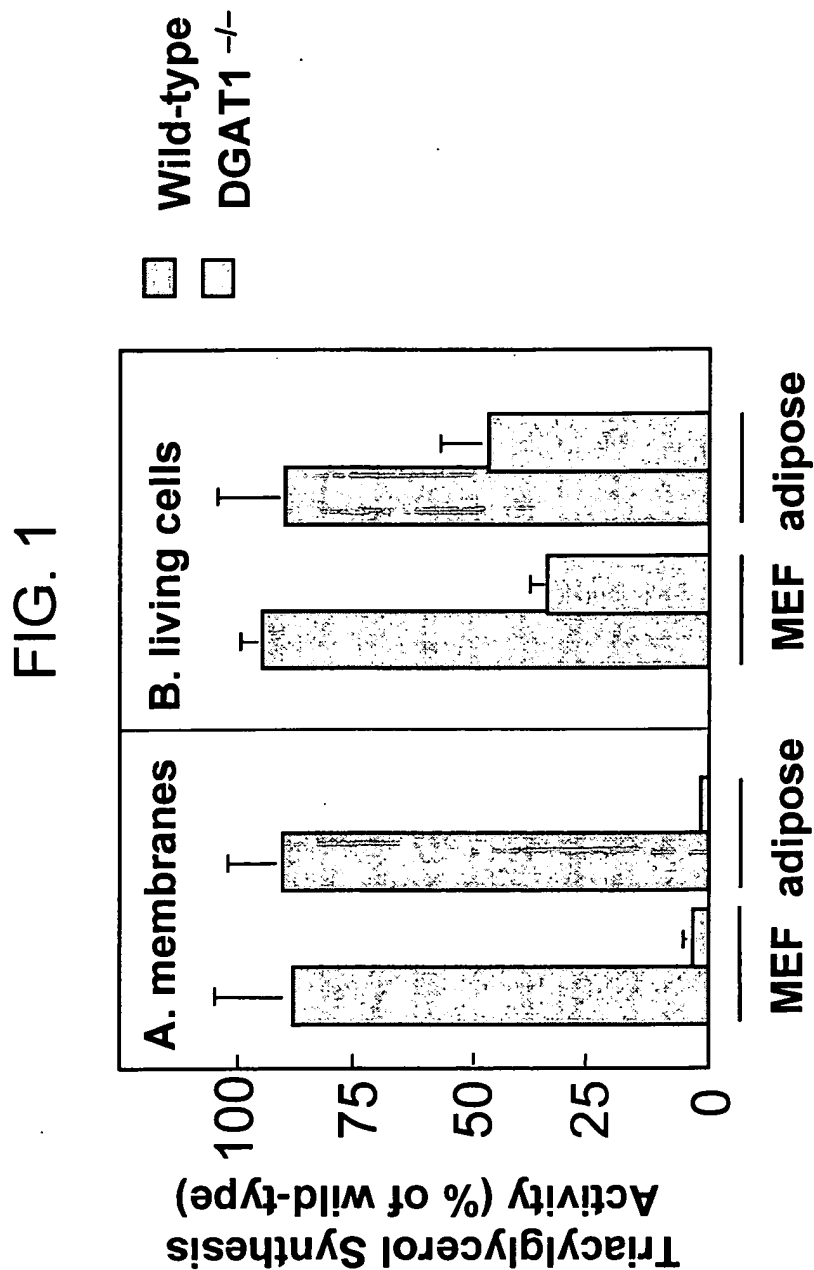


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Filed: 1/14/02
For: "Mono- and Diacylglycerol Acyltransferases
and Methods of Use Thereof"
(19) Drawing pages



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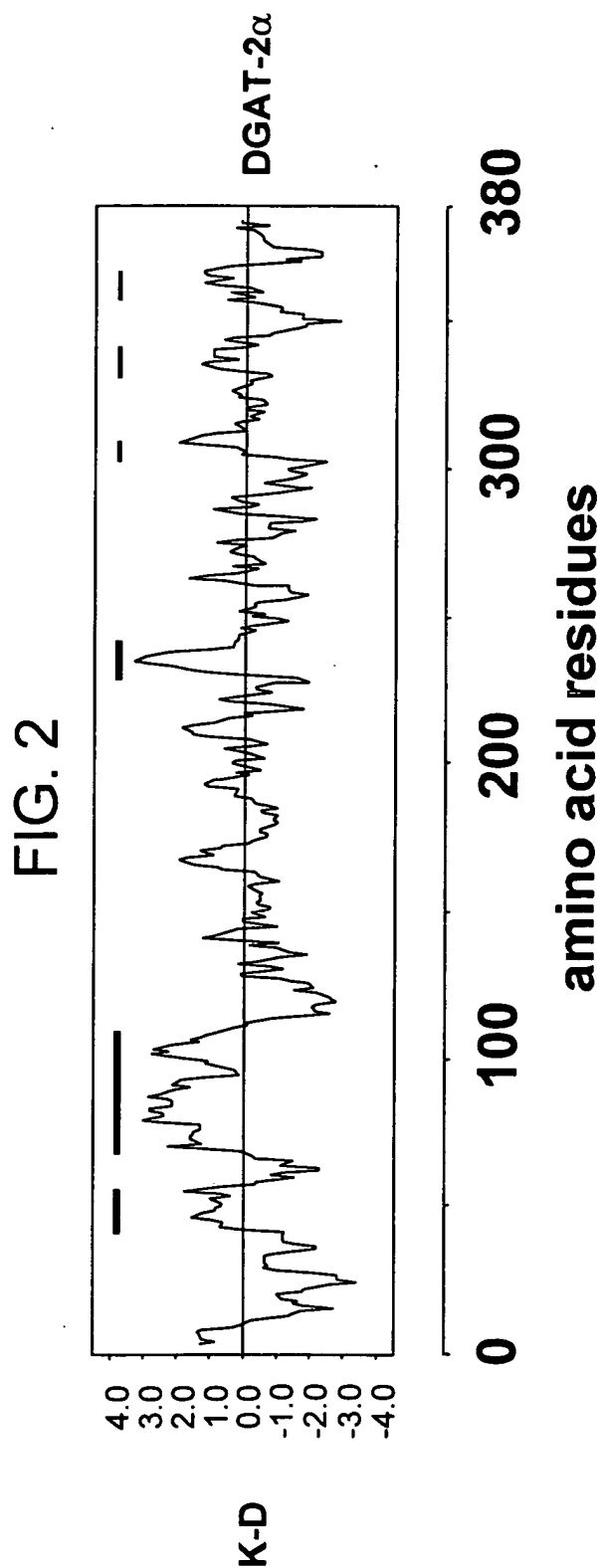


FIG. 3A

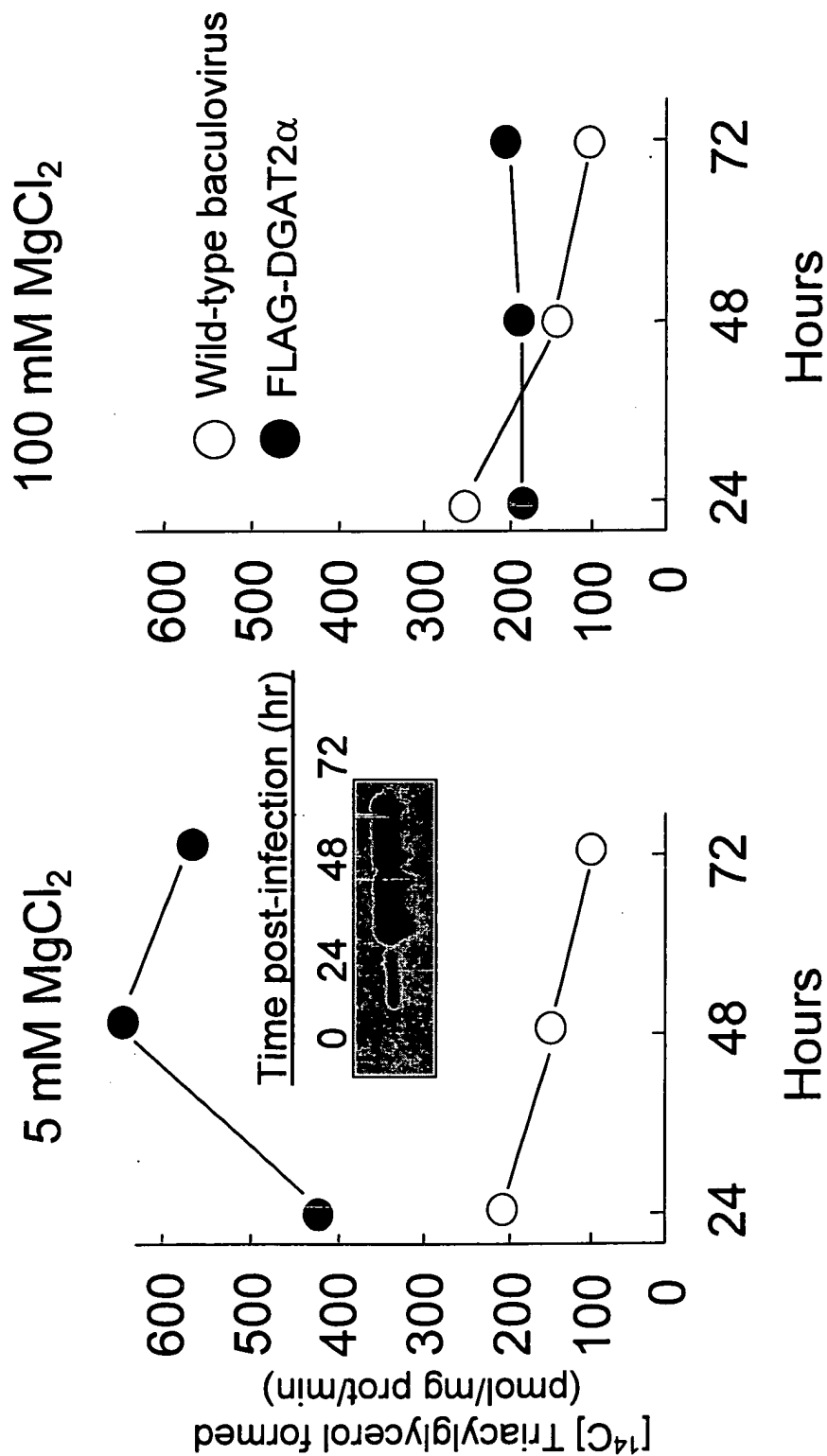


FIG. 3B
B. DGAT2 α activity as a function of
Diacylglycerol

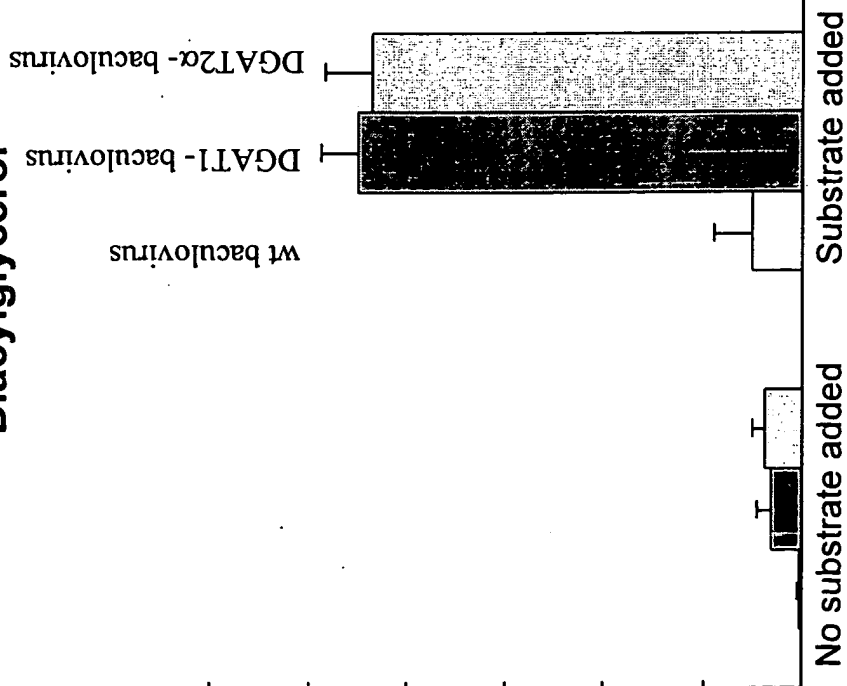


FIG. 3C
C. DGAT2 α activity as a function of
Oleoyl Coenzyme A

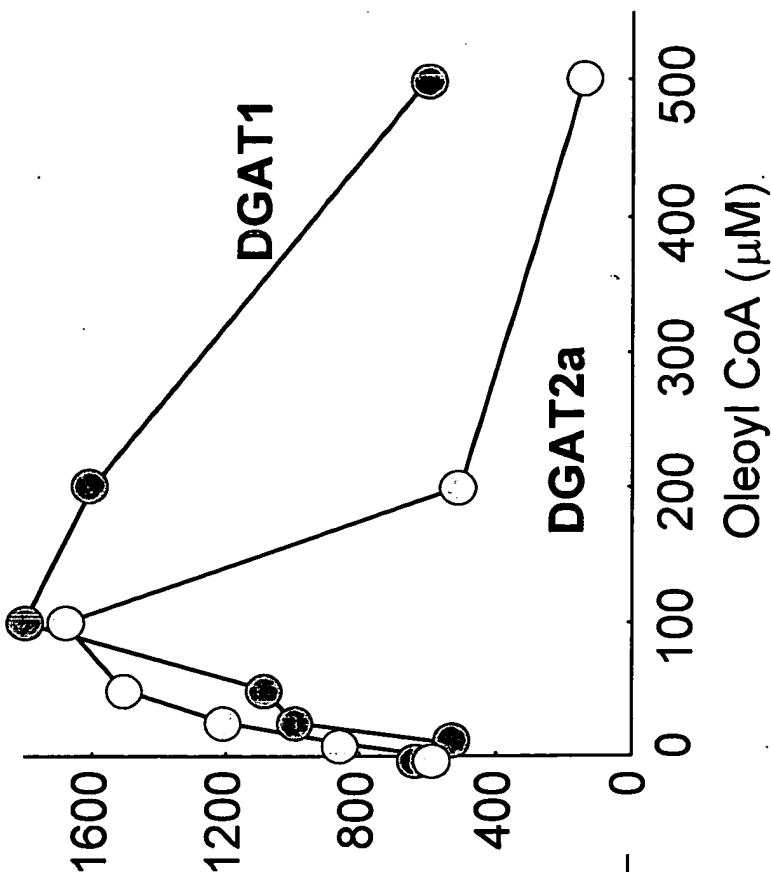


FIG. 4
A. Tissue distribution of human DGAT2 α

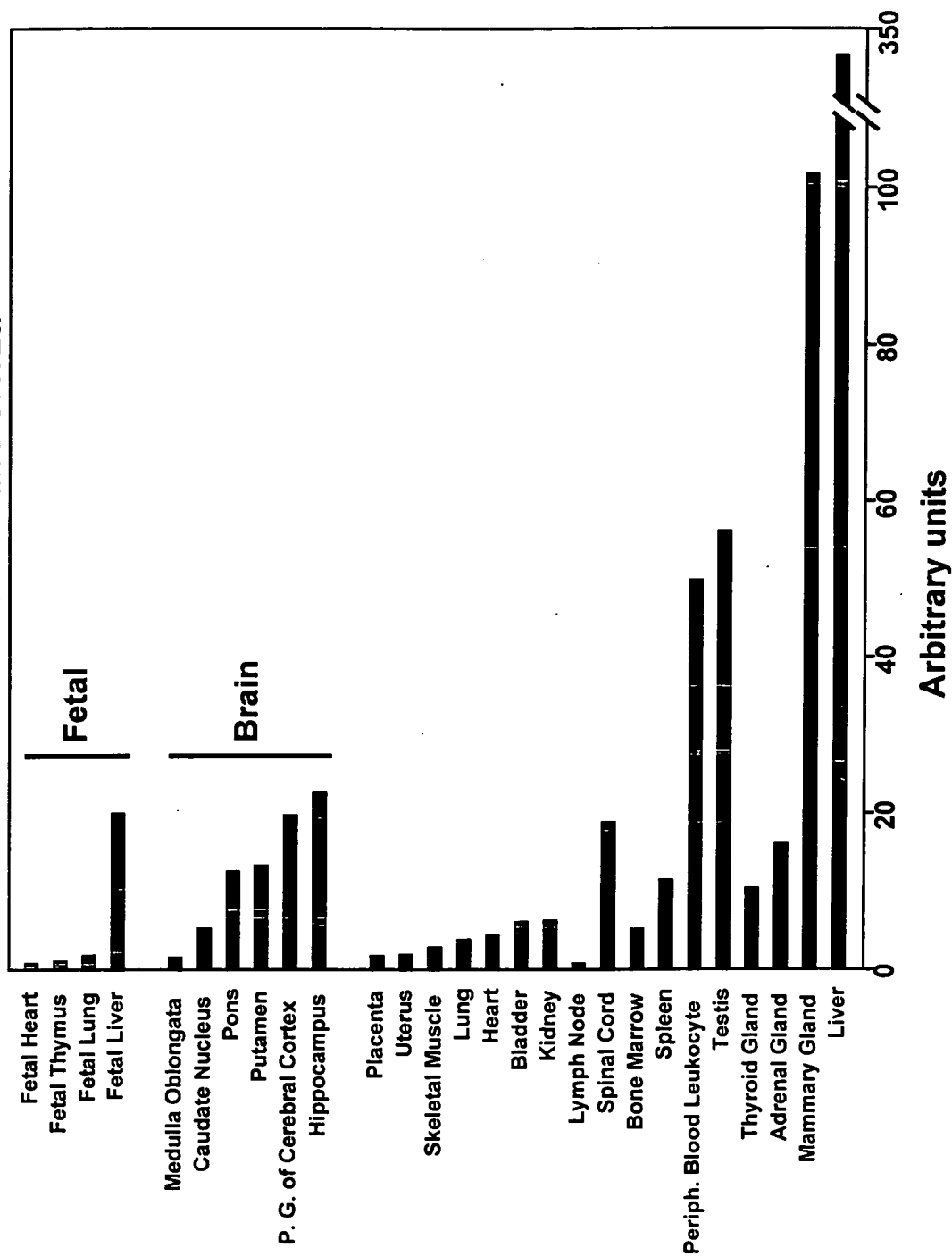


FIG. 5

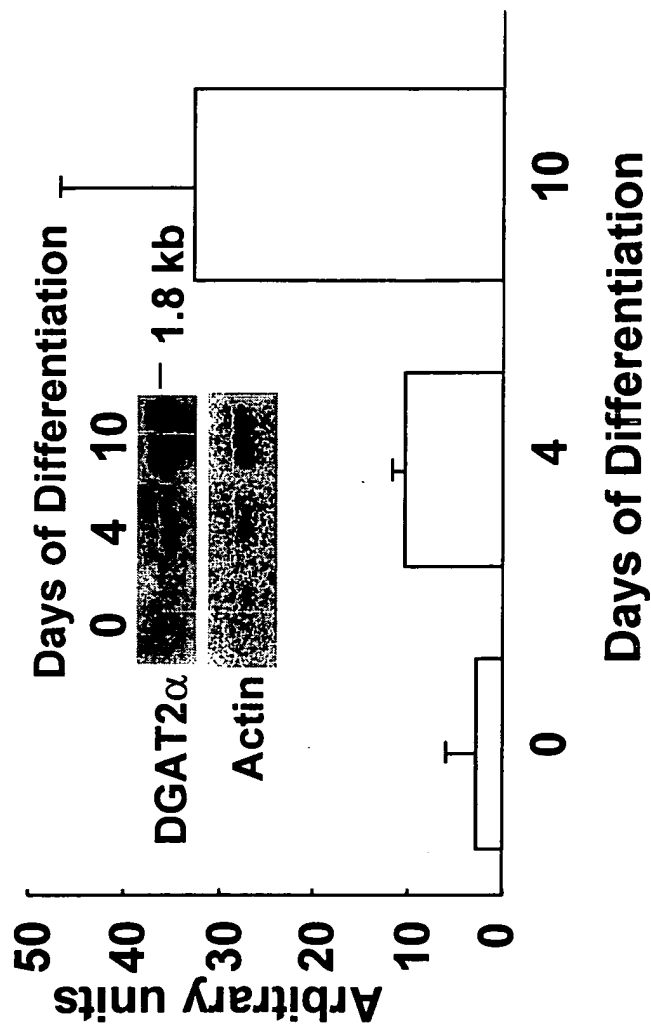


FIG. 6A

Mouse DGAT2 α amino acid sequence

MKTLIAAYSGVLRGERRAELPAAKNKNKGSALSREGSGRWGTGSSILSALQDIFSVTLNRSKVEKQLQV
ISVLQWVLSFLVLGVACSVILMYTFCTDCWLIAVLYFTWLAFDWNTPKKGGRRSQWVRNWAVWRYFRDYF
PIQLVKTHNLLTTRNYIFGYHPHGIMGLGAFCNFSTEATEVSKKFPGIRPYLATLAGNFRMPVLREYLMS
GGICLVNRDTIDYLLSKNGSGNAIIIVVGAAESLSSMPGKNAVTLKNRKGFVKLALRHGADLVPTYSFG
ENEVYKQVIFEESWGRWVKFKQKYIGFAPCIFHGRGLFSSDTWGLVPYSKPITTTVGEPIITVPKLEHPT
QKDIDLYHAMYMEALVKLFDNHKTKFGLPETEVLEVN (SEQ ID NO:04)

FIG. 6B

Mouse DGAT2 α nucleic acid sequence

ATGAAGACCCTCATCGCCGCTACTCCGGGGTCTGCGGGGTGAGCGTCGGGCGGAAGCTGCCCCGAGCGAA
AACAAGAATAAAGGATCTGCCCTGTACGCGAGGGGTCTGGGCGATGGGGCACTGGCTCCAGCATCCTCTCA
GCCCTCCAAGACATCTTCTCTGTACCTGGCTCAACAGATCYAAGGTGGAAAAACAGCTGCAGGTCACTCA
GTACTACAATGGGTCTATCCTTCTGGTGCTAGGAGTGGCCTGCAGTGTCACTCATGTACACCTTCTGC
ACAGACTGCTGGCTGATAGCTGTGCTCTACTTCACCTGGCTGGCATTGACTGGAAACACGCCCCAAGAAAGGT
GGCAGGAGATCGCAGTGGGTGCGAAACTGGGCGGTGTGGCGCTACTTCCGAGACTACTTTCCCATCCAGCTG
GTGAAGACACACAACCTGCTGACCACCAGGAACTATATCTTTGGATACCACCCCCATGGCATCATGGGCCCTG
GGTGCCCTTCTGTAACTTCAGCACAGAGGCTACTGAAGTCAGCAAGAAGTTTCTGGCATAAGGCCCTATTTG
GCTACGTTGGCYGGTAACTTCCGGATGCCTGTGCTTCGCGAGTACCTGATGTCTGGAGGCATCTGCCCTGTC
AACCGAGACACCATAGACTACTTGCTCTCCAAGAATGGGAGTGGCAATGCTATCATCATCGTGGTGGGAGGT
GCAGCTGAGTCCCTGAGCTCCATGCCTGGCAAGAACGCAGTCACCCTGAAGAACCGCAAAGGCTTTGTGAAG
CTGGCCCTGCGCCATGGAGCTGATCTGGTTCCCACTTATTCTTTGGAGAGAATGAGGTATACAAGCAGGTG
ATCTTTGAGGAGGGTTCTTGGGGCCGATGGGTCCAGAAGAAGTTCCAGAAGTATATTGGTTTCGCCCCCTGC
ATCTTCCATGGCCGAGGCCTCTTCTCTCTGACACCTGGGGGCTGGTGCCCTACTCCAAGCCCATCACCACC
GTCGTGGGGGAGCCCATCACTGTCCCCAAGCTGGAGCACCCGACCCAGAAAAGACATCGACCTGTACCATGCC
ATGTACATGGAGGCCCTGGTGAAGCTCTTTGACAATCACAAGACCAAATTTGGCCTNCCAGAGACTGAGGTG
CTGGAGGTGAACTGA (SEQ ID NO:03)

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FIG. 7A

Human DAGT2 α amino acid sequence

MKTLIAAYSGVLRGERQAEADRSQRSHGGPALSREGSGRWGTGSSILSALQDLFSVTWLNRSKVEKQLQV
ISVLQWVLSFLVLGVACSAILMYIFCTDCWLI AVL YFTWL VFDWNTPKKGRRSQWVRNWAVWRYFRDYF
PIQLVKTHNLLTTRNYIFGYHPHGIMGLGAF CNFSTEATEVSKKFPGIRPYLATLAGNFRMPVLREYLMS
GGICPVSRDTIDYLLSKNGSGNAIIIVVGAAESLSSMPGKNAVTLNRKGFVKLALRHGADLVPIYSFG
ENEVYKQVIFEEGSWGRWVQKKFQKYIGFAPCIFHGRGLFSSDTWGLVPYSKPITTVVGEPITIPKLEHP
TQQDIDLYHTMYMEALVKLFDKHKTKFGLPETEVLEV N (SEQ ID NO:02)

FIG. 7B

Human DAGT2 α nucleic acid sequence

TTCAGCCATGAAGACCCCTCATAGCCGCCTACTCCGGGGTCTGCGCGGCGAGCGTCAGGCCGAGGCTGACCG
GAGCCAGCGCTCTCACGGAGGACCCGTGTCGCGGAGGGGTCTGGGAGATGGGGCACTGGATCCAGCATCCT
CTCCGCCCTCCAGGACCTCTTCTCTGTCACTGGCTCAATAGGTCCAAGGTGGAAAAGCAGCTACAGGTCAT
CTCAGTGCTCCAGTGGGTCTGTCTTCTTGTACTGGGAGTGGCCTGCAGTGCCATCCTCATGTACATATT
CTGCACTGATTGCTGGCTCATCGCTGTGCTCTACTTCACTTGGCTGGTGTGTTGACTGGAACACACCCAAGAA
AGGTGGCAGGAGGTACAGTGGGTCCGAAACTGGGCTGTGTGGCGCTACTTTCGAGACTACTTCCCATCCA
GCTGGTGAAGACACACAACCTGCTGACCACCAGGAATAATCTTTGGATACCACCCCATGGTATCATGGG
CCTGGGTGCCTTCTGCAACTTCAGCACAGAGGCCACAGAAGTGAGCAAGAAGTTCACAGGCATACGGCCTTA
CCTGGCTACACTGGCAGGCAACTTCCGAATGCCTGTGTTGAGGGAGTACCTGATGTCTGGAGGTATCTGCCC
TGTCAGCCGGGACACCATAGACTATTTGCTTTCAAAGAATGGGAGTGGCAATGCTATCATCATCGTGGTCGG
GGGTGCGGCTGAGTCTCTGAGCTCCATGCCTGGCAAGAATGCAGTCACCCTGCGGAACCGCAAGGGCTTGT
GAAACTGGCCCTGCGTCATGGAGCTGACCTGGTTCCTATCTACTCCTTTGGAGAGAATGAAGTGACAAGCA
GGTGATCTTCGAGGAGGGCTCCTGGGGCCGATGGGTCCAGAAGAAGTTCAGAAATACATTGGTTTCGCCCC
ATGCATCTTCCATGGTCGAGGCCTCTTCTCCTCCGACACCTGGGGGCTGGTGCCCTACTCCAAGCCCATCAC
CACTGTTGTGGGAGAGCCCATCACCATCCCCAAGCTGGAGCACCCAACCCAGCAAGACATCGACCTGTACCA
CACCATGTACATGGAGGCCCTGGTGAAGCTCTTCGACAAGCACAAAGACCAAGTTCGGCCTCCCGGAGACTGA
GGTCTGGAGGTGAACTGAGCCAGCCTTCGGGGCCAATTCCCTGGAGGAACCAGCTGCAAATCACTTTTTTG
CTCTGTA (SEQ ID NO:01)

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FIG. 8A

Mouse DC2 amino acid sequence

MMVEFAPLNTPLARCLQTA AVLQWVLSFLLLQVCIGIMVMLVLYNYWFLYIPYLVWFYDWRTP EQQGR
RWNWVQSWPVWKYFKEYFPICLVKTDLDLDPGHNYIFGFHPHGIFVPGA FGNFCTKYSDFKKLFPGFTSYL
HVAKIWFCFPLFREYLMSNGPVSVSKESSLHVL SKDGGGNVSIIVLGGAKEALEAHPGTFTLCIRQRKGF
VKMALTHGASLVPVFSFGENDLYKQINNPKG SWLRTIQDAMYDSMGVALPLIYARGIFQHYFGIMPYRKL
IYTVVGRPIPVQQILNPTSEQIEELHQTYLEELKKLFNEHKKGKYG IPEHETLVFK (SEQ ID NO:06)

Mouse DC2 nucleic acid sequence

ATGATGGTTCGAGTTTCGCGCCACTCAACACCCCGCTGGCACGGTGCCTACAGACCGCTGCGGTGCTGCAGTGG
GTCCTGTCTCTCCTCCTGCTCGTGCAGGTGTGCATTGGAATTATGGTGATGCTGGTCTGTACA ACTATTGG
TTCCTTTACATCCCATATCTGGTCTGGTTTTACTATGACTGGAGAACCCAGAGCAAGGAGGCAGAA GATGG
AACTGGGTCCAAAGCTGGCCTGTGTGGAAGTATTTTAAGGAGTATTTTCCAATCTGTCTTGTCAA AACGCAG
GATTTGGATCCGGGTACAATTATATATTTGGGTTTCACCCCTCATGGAATATTCGTGCCTGGAGCCTTTGGA
AATTTTTGTACAAAATACTCGGACTTCAAGAAGCTATTTCTGGCTTTACATCGTATCTCCACGTGGCCAAG
ATCTGGTTCTGTTTCCCGTTGTTCCGAGAATATCTGATGAGTAACGGGCCGGTTTCAGTGTCTAAGGAGAGT
TTGTCTCATGTGCTGAGCAAGGATGGAGGTGGCAATGTCTCAATCATTGTCTCGGAGGTGCAAAGGAGGCG
CTGGAGGCTCACCCAGGAACATTACCCCTGTGCATCCGCCAGCGCAAAGGGTTTGTTAAGATGGCCTTGACC
CATGGTGCCAGTTTGGTTCCAGTATTTTCTTTTGGTGAAAATGATCTATATAAGCAAATTAACAACCCCAA
GGCTCCTGGCTACGAACATACAAGACGCAATGTATGATTCAATGGGAGTAGCCTTGCCACTGATATATGCC
AGAGGAATTTTCCAGCACTACTTTGGCATAATGCCCTATCGGAAGCTGATCTACACTGTTGTTGGCCGCCCT
ATCCCTGTTTCAGCAGATTCTGAACCCGACCTCAGAGCAGATTGAAGAGCTGCATCAGACATACCTAGAGGAG
CTAAAGAAACTATTCAATGAACACAAAGGGAAATATGGGATTCCGGAGCACGAAACTCTGGTATTTAAATAA
(SEQ ID NO:05)

Human DC2 amino acid sequence

MKVEFAPLNIQLARRLQTVAVLQWVLSFLTGPMSIGITVMLIIHNYLFLYIPYLMWLYFDWHTPERGGRR
SSWIKNWT LWKHFKDYFPIHLIKTQDLDP SHNYIFGFHPHGIMAVGAFGNFSVNYSDFKDLFPGFTSYLH
VLPLWFWCVPVFREYVMSVGLVSVSKKSVSYMVSKEGGNISVIVLGGAKESLDAHPGKFTLFIRQRKGFV
KIALTHGASLVPVVSFGENELFKQTDNPEG SWIRTVQNKLQKIMGFALPLFHARGVFQYNFGLMTYRKAI
HTVVGRPIPVQRQLNPTQEIEELHQTYMEELRKLFEHKGKYG IPEHETLVLK (SEQ ID NO:08)

Human DC2 nucleic acid sequence

CGTGGGTGCAGGCTGCAGTGGCTGGCGCCGTCTCGCCCGGCCAGGCCATGAAGGTAGAGTTTGCACCGCTC
AACATCCAGCTGGCGCGGCGGCTGCAGACGGTGGCCGTGCTGCAGTGGGTCTTTCTTTTCTTACAGGGCCG
ATGTCCATTGGAATCACTGTGATGCTGATCATACAACTATTTGTTCTTTTACATCCCTTATTTGATGTGG
CTTTACTTTGACTGGCATACCCAGAGCGAGGAGGCAGGAGATCCAGCTGGATCAAAAATTGGACTCTTTGG
AAACACTTTAAGGACTATTTTCCAATTCATCTTATCAAACTCAAGATTTGGATCCAAGTCACAACTATATA
TTTGGGTTTTCACCCCATGGAATAATGGCAGTTGGAGCCTTTGGGAATTTTCTGTAAATTATTTGACTTC
AAGGACCTGTTTCTGGCTTTACTTCATATCTTCACGTGCTGCCACTTTGGTTCTGGTGTCTGTCTTTCGA
GAATATGTGATGAGTGTGGGCTGGTTTCAGTTTCCAAGAAAAGTGTGTCTACATGGTAAGCAAGGAGGGA
GGTGGAAACATCTCTGTCTATTGTCTTGGGGGTGCAAAAGAATCACTGGATGCTCATCTGGAAAGTTCACT
CTGTTTCATCCGCCAGCGGAAAGGATTTGTTAAAATTGCTTTGACCCATGGCGCCTCTCTGGTCCCAGTGGTT
TCTTTTGGTGAAAATGAACTGTTTAAACAACTGACAACCTGAAGGATCATGGATTAGAACTGTTTCAAGT
AAACTGCAGAAGATCATGGGGTTTGCTTTGCCCTGTTTCATGCCAGGGGAGTTTTTTCAGTACAATTTTGGC
CTAATGACCTATAGGAAAGCCATCCACACTGTTGTTGGCCGCCGATCCCTGTTTCGTGAGTCTGAACCCG
ACCCAGGAGCAGATTGAGGAGTTACATCAGACCTATATGGAGGAACCTTAGGAAATTGTTTGAGGAACACAAA

20469404

FIG. 8B

Mouse DC3 amino acid sequence (partial sequence, about 100 amino acids gap in the center of the protein)

MKTEHLQSLSLQWPLSYVAMFWIVQPLLIICLLFTPLWPLPTVYFVWLLLDWKTPDKGRRSDWVRNWNV
WNHIRDYFPITILKTKDLSPSENYIMGVPHGLLTFGAFCNFCTEATGFSKTFPGITPHLATLSWFFKIP
IIRDYIMAKGLCSVSQASIDYLLSHGTGNLVGIIPIITVVGEALPLPQVKNPSP EIVDKYHALYMDALYKL
FEQHKVQYGCSTNTQKLIFL (SEQ ID NO:10)

Mouse DC3 nucleic acid sequence (partial sequence, about 100 amino acids gap in the center of the protein)

TTACCTCCCTCAGGGTCCTGGGCATCATGTCTTGCTCTATGAAGACTGAACACTTACAGAGTCTGAGCCTTC
TGCAGTGGCCCTTGAGCTACGTTGCCATGTTTTGGATTGTGCAGCCATTGTTAATTTGCCTATTGTTACAC
CCTTGTGGCCGCTACCAACAGTTTACTTTGTCTGGTTACTTCTCGACTGGAAGACTCCAGATAAAGGTGGCA
GGCGTTTCACTGAGTACGGAAGTGAATGTCTGGAACCATCATCAGGGACTATTTCCCCATTACAATCCTGA
AGACTAAGGACCTGTACCTTCAGAGAACTACATCATGGGGGTCCACCCCATNGGTCTCCTGACCTTCGGTG
CCTTCTGCAACTTCTGCACTGAGGCCACAGGCTTCTCGAAGACCTTCCAGGCATCACTCCTCACTTGGCCA
CAC (SEQ ID NO:09)

Human DC3 amino acid sequence

MAFFSRLNLQEGLOTFFVLQWIPVYIFLVWILQPLFVYLLFTSLWPLPVLYFAWLFLDWKTPERGGRRSA
WVRNWCVWTHIRDYFPITILKTKDLSPHENYLMGVPHGLLTFGAFCNFCTEATGFSKTFPGITPHLATL
SWFFKIPFVREYLMAGVCSVSQPAINYLLSHGTGNLVGIVVGGVGEALQSVNNTTLLILQKRKGFVRTA
LQHAYLVPSYSFGENEVFNQETFPEGTWLRLFQKTFQDTFKKILGLNFCTFHGRGFTRGSWGFLLPFNR
PITTVVGEPLPIPRIKRPNQKTVDKYHALYISALRKLFDQHKVEYGLPETQELTIT (SEQ ID NO:12)

Human DC3 nucleic acid sequence

ATCAACTCAGCTTAAGAAGTTTTGGCCTTCTGGTTAGGCTTCTTGCCACAACAGAACAGCACCATAACCATG
GCTTTCTTCTCCCGACTGAATCTCCAGGAGGGCCTCCAAACCTTCTTTGTTTTGCAATGGATCCCAGTCTAT
ATATTTTTAGTTTGGATCTTGCAGCCATTGTTTCGTCTACCTGCTGTTTACATCCTTGTGGCCGCTACCAAGT
CTTTACTTTGCCTGGTTGTTCCCTGGACTGGAAGACCCAGAGCGAGGTGGCAGGCGTTTCGGCCTGGGTAAGG
AACTGGTGTGTCTGGACCCACATCAGGGACTATTTCCCCATTACGATCCTGAAGACAAAGGACCTATCACCT
GAGCACAACCTACCTCATGGGGGTTACCCCCATGGCCTCTTGACCTTTGGCGCCTTCTGCAACTTCTGCACT
GAGGCCACAGGCTTCTCGAAGACCTTCCAGGCATCACTCCTCACTTGGCCACGCTGTCTGCTTCTTCAAG
ATCCCCCTTTGTTAGGGAGTACCTCATGGCCAAAGGTGTGTGCTCTGTGAGCCAGCCAGCCATCAACTATCTG
CTGAGCCATGGCACTGGCAACCTCGTGGGCATTGTAGTGGGAGGTGTGGGTGAGGCCCTGCAAAGTGTGCC
AACACCACCACCTCATCTCCAGAAGCGCAAGGGGTTCTGTGCGCACAGCCCTCCAGCATGGGGCATACTT
GTCCCTTCATATTCCTTTGGTGAGAACGAAGTTTTCAATCAGGAGACCTTCCCTGAGGGCACGTGGTTAAGG
TTGTTCCAAAAAACCTTCCAGGACACATTCAAAAAATCCTGGGACTAAATTTCTGTACCTTCCATGGCCGG
GGCTTCACTCGCGGATCCTGGGGCTTCTGCCTTTCAATCGGCCCATTAACACTGTTGTTGGGGAACCCCTT
CCAATTCCCAGGATTAAGAGGCCAAACAGAACAGTAGACAAGTATCACGCACCTACATCAGTGCCTTG
CGCAAGCTCTTTGACCAACACAAAGTTGAATATGGCCTCCCTGAGACCCAAGAGCTGACAATTACATAACAG
GAGCCACATTTCCCATTTGATCAACCCCCAAAGCCATGAGGGATCCAAGTAGAGCCACAGAAAAAGAAGAAAT
CCAGGAGAGGGAAAGATCGTAAGGATGAGAGAGGAGACCATCCAAGCCAGAAATTATTTAATAAATCAGAGT
TCTAGCAATAGAGTCC (SEQ ID NO:11)

204770-126900T

FIG. 8C

Human DC4 amino acid sequence

MLLPSKKDLKTALDVFAVFQWSFSALLITTTVIAVNLYLVVFTPYWPVTVLILTWLAFDWKTPQRGRRF
TCVRHWRLWKHYSDYFPLKLLKTHDICTPSRNYILVCHPHGLFAHGWFHGFATEASGFSKIFPGITPYILT
LGAFFWMPFLREYVMSTGACSVSRSSIDFLLLTHKGTGMVIVVIGGLAECRYSLPGSSSTLVLKNRSGFVR
MALQHGVPILIPAYAFGETDLYDQHI FTGGFVNRFQKWFQSMVHIYPCAFYGRGFTKNSWGLLPYSRPVT
TIVGEPLPMPKIENPSQEIVAKYHTLYIDALRKLFQHKTKFGISETQELEII (SEQ ID NO:014)

Human DC4 nucleic acid sequence

AATTCGGCTTACTCACTATAGGGCTCGAGCGGCCCCCGGGCAGGTGCCGACTTCATTTCCAAGTCTGCAC
ACAATGCAGGCAGTAGCCATGCCTGACAGCCACATGACAGATACTACACCGCTGAATGTGCTCTAACCCCT
GGACTTGGCATTGCCCCCTACTGTTGAGGAAGCAGTGCGTTTTTCTCCAGTCTTTTCAGGTCCCTTCACCAG
GGAACCATTAACTTGTGCATCAGAACAAGGACATTTCTTACATTCTCTGCAAAACACAGTCCCTTCAGTTT
ACTCTTTTTTTGAGGGGGGGGCGCGGGGAACGGAGTCTCGCTCTGTGCGCCAGGCTGGAGTGCAATGGTG
CAATCTCAGCTCACTGCAACCTCTGCCTCCCAGGTCCAAGCGATTCTCTGCTCAGCTCCCGGGTAGC
CGGGACTACAGGCGCCTGCCACCACGCCCCGCTAATTTTTGTATTTTTAGTAGAGACGAGGTTTCGCCGT
GTTGGCAGGCTGGTCTTGGAACCTCTGACCTCAGGTGATTTACTCGCTCGGCCTCCCAAAGTGCTGGGA
TTACAGGCATGAGCCACTGTGCCCAGTCACAAGTTTTTATTTTAGCCATTTTGATAAGTGTGAAGTTCCC
TGATGGCTAATGATGTTCTTTTTTCCATGTGCTCATTTGTCTATGTCAGAGAAAGATTTGGAGAGGAG
GACGTGAATTGGAGGAAAACCTGTTCCAGGATTCCCCACCTCTGGTGGCCCCACCGCTGGCTCACTGCCATT
GACCACACTGCAGGCAGAGCCTAGTGAGTGCTGGAGCAGGGCCCAGAGAGGAGAGGGCTTACAGTGTTGA
ATTCAGCTCAGCTGGGGAAGAAGACACCTTCCCTTCTAGACCTGAATCGGGTTCCCAAGCAACCACTGTG
ATTGCTGTCAACCTCTACCTGGTGGTGTTCACACCATACTGGCCTGTCACTGTGCTTATTCTTACCTGGC
TGGCTTTTGACTGGAAGACCCCTCAGCGAGGCGGCCCGGTTTACCTGTGTGAGGCACTGGCGCCTGTG
GAAACACTACAGCGATTATTTCCCTCTCAAGCTTCTGAAGACTCATGACATCTGCCCCAGCCGCAACTAC
ATCCTCGTCTGCCACCCTCATGGGCTCTTTGCCCATGGATGGTTTGGCCACTTTGCCACAGAGGCCTCAG
GCTTCTCCAAGATATTTCTGGCATCACCCCTTACATACTCACACTGGGAGCCTTTTTCTGGATGCCTTT
CCTCAGAGAATATGTAATGTCTACAGGGGCTGCTCTGTGAGTCGATCCTCCATTGACTTTCTGCTGACT
CATAAAGGCACAGGCAACATGGTCATTGTGGTGATTGGTGGACTGGCTGAGTGAGATACAGCCTGCCAG
GTTCTTCTACCCTGGTGTGGAAGAACCGGTCTGGCTTTGTGCGCATGGCCCTTCAGCATGGGGTGCTCT
AATACCTGCCTATGCCTTTGGGGAGACGGACCTCTATGATCAGCACATTTTCACTCCTGGTGGCTTTGTC
AACCGCTTCCAGAAGTGGTTCCAGAGCATGGTACACATCTACCCTTGTGCTTTCTATGGACGTGGCTTCA
CCAAGAAGCTCCTGGGGCCTTCTGCCCTATAGTCGGCCTGTAACCACCATCGTCGGGGAGCCTCTACCAAT
GCCCAAGATTGAGAATCCAAGCCAGGAGATCGTGGCTAAATATCACACACTCTATATTGATGCCCTACGT
AAACTGTTTGACCAGCATAAGACCAAGTTTGGTATCTCAGAGACCCAGGAGCTGGAGATAATTTGACAGA
CATCCCCAGTAGCCTTCACCCTGGCTGGAAGGTATGGATGGACCCAGTGAGA (SEQ ID NO:013)

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FIG. 8D

Human DC5 amino acid sequence

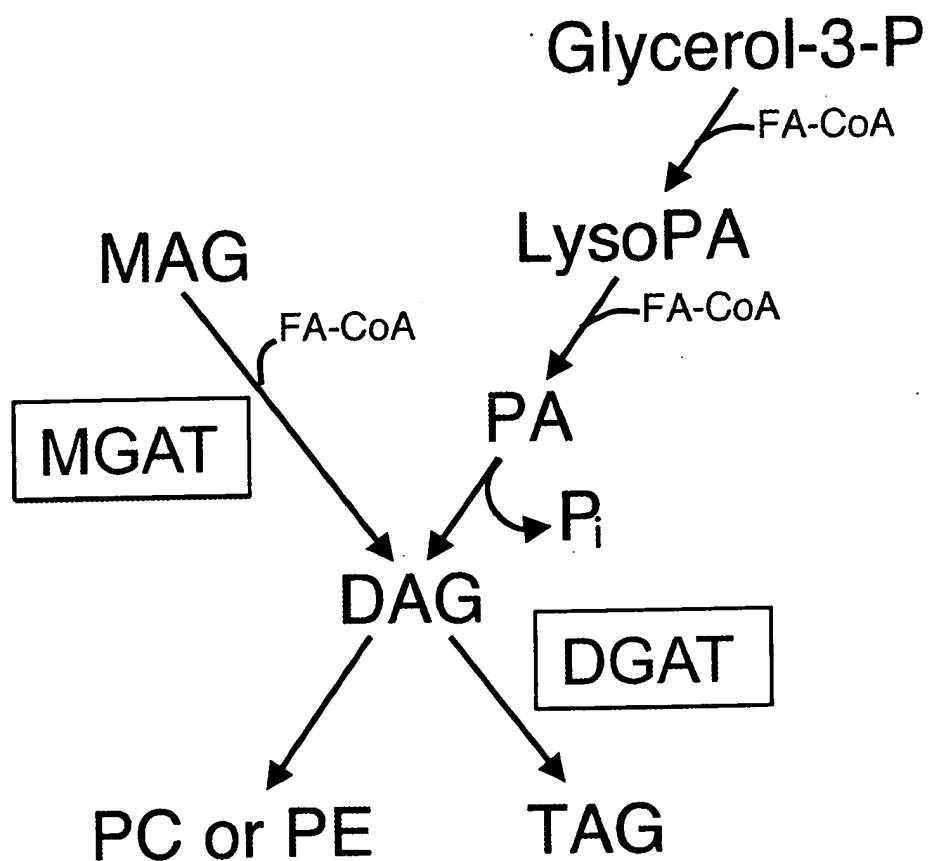
MVEFAPLFVPWERRRLQTLAVLQFVFSFLALGKICTVGFIALLFTRFWLLTVLYAAWVYLDRDKPRQGGRH
IQAIRCWTIWKYMKDYFPIQLVKTAELDPSRNYIAGFHPHGVLAVGAFANLCTESTGFSSIFPGIRPHLM
MLTLWFRAPFFRDYIMSAGLVTSEKESAAILNRKGGNLLGIIVGGAQEALDARPGSFLLLLNRKGFV
RLALTHGAPLVPIFSFGENDLFDQIPNSSGSLWRYIQNRLQKIMGISLPLFHGRGVFQYSFGLIPYRRPI
TTVGKPIEVQKTLHPSEEEVNQLHQHYIKELCNLFEAHKLKFNIPADQHLEFC (SEQ ID NO:16)

Human DC5 nucleic acid sequence

CCACAGCAGAGCTCACAGAACCTGCGGGAGCCAGGCTGACCCGCCAGCATGGTAGAGTTCGCGCCCTTGTTT
GTGCCGTGGGAGCGCAGGCTGCAGACACTTGCTGTCTTACAGTTTGTCTTCTCCTTCTTGGAAGTAAAG
ATCTGCACTGTGGGCTTCATAGCCCTCCTGTTTACAAGATTCTGGCTCCTCACTGTCTGTATGCGGCCTGG
TGGTATCTGGACCGAGACAAGCCACGGCAGGGGGGCGGCACATCCAGGCCATCAGGTGCTGGACTATATGG
AAGTACATGAAGGACTATTTCCCCATCCAGCTGGTCAAGACTGCTGAGCTGGACCCCTCTCGGAACCTACATT
GCGGGCTTCCACCCCATGGAGTCTGCGAGTCCGAGCCTTTGCCAACCTGTGCACTGAGAGCACAGGCTTC
TCTTCGATCTTCCCCGGTATCCGCCCCATCTGATGATGCTGACCTTGTGGTTCCGGGCCCCCTTCTTCAGA
GATTACATCATGTCTGCAGGGTTGGTCACATCAGAAAAGGAGAGTGCTGCTCACATTCTGAACAGGAAGGGT
GGCGGAAACTTGCTGGGCATCATTGTAGGGGGTGCCAGGAGGCCCTGGATGCCAGGCCCTGGATCCTTCACG
CTGTTACTGCGGAACCGAAAGGGCTTCGTAGGCTCGCCCTGACACACGGGGCACCCCTGGTGCCAATCTTC
TCCTTCGGGGAGAATGACCTATTTGACCAGATTCCCAACTCTTCTGGCTCCTGGTTACGCTATATCCAGAAT
CGGTTGCAGAAGATCATGGGCATCTCCCTCCCACTCTTTCATGGCCGTGGTGTCTTCCAGTACAGCTTTGGT
TTAATACCCTACCGCCGGCCCATCACCCTGTGGGGAAGCCCATCGAGGTACAGAAGACGCTGCATCCCTCG
GAGGAGGAGGTGAACCAGCTGCACCAGCATTATATCAAAGAGCTGTGCAACCTCTTCGAGGCCACAACTT
AAGTTCAACATCCCTGCTGACCAGCACTTGGAGTTCTGCTGA (SEQ ID NO:15)

204410" 42634001

FIG. 9



204410356US

FIG. 10A

mMGAT1 MMVEFAPLN-----TPLAR-----
mDGAT2 MKTLIAAYSGVLRGERRAEAAARSENKNKGSALSREGSGRWGTGSSILSALQDIFSVTLWN
* . :*. . :.*.*

mMGAT1 -----CLQTAAVLQWVLSFLLLQVCIGIMVMLVLYNYWFLYIPYLVWFYYDWRTPEQG
mDGAT2 RSKVEKQLQVISVLQWVLSFVLGVACSVILMYTFCTDCWLI AVL YFTWLA FDWNTPKKG
** . :*****:* . * *:: . : *:: : *::* : **.*::*

mMGAT1 GRRWNWVQSWPVWKYFKEYFPICLVKTQDLDPGHNYIFGFHPHGIFVPGAFCN[F]CTKYSD
mDGAT2 GRRSQWVRNWAVWRYFRDYFPIQLVKTHNLLTTRNYIFGYHPHGIMGLGAFCN[F]STEATE
*** :*:.*.*::*:***** :* . :*****:*****: *** **.*: ::

mMGAT1 FKKLFPGFSTSYLHVAKIWFCFPLFREYLMSGNPVSVSKESLSHVLSKDGGGN[F]SIIVLGG
mDGAT2 VSKKFPGIRPYLATLAGNFRMPVLRREYLMSGGICPVNRDTIDYLLSKNGSGN[F]AIIVVGG
..* ***: .** . * :*:*****.* .*::*:*****:***.***.***.*

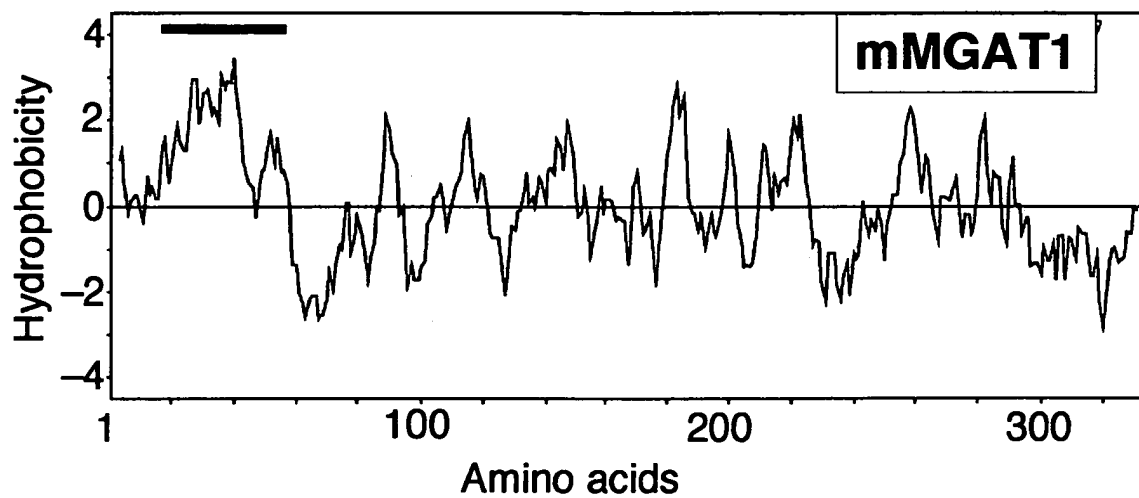
mMGAT1 AKEALEAHPGTFTLCIRQRKGFVKMALTHGASLVPVFSFGENDLYKQINNPKGSWLRTIQ
mDGAT2 AAESLSSMPGKNAVTLKNRKGFKLALRHGADLVPTYSFGENEVYKQVIFEEGSWGRWVQ
* *::*:.*. :* :*:*****:* ***.***.*:*****:***: *** * :*

mMGAT1 DAM[F]DSMGVALPLIYARGIFQ-HYFGIMPYRKLIYTVVGRPIPVQQILNPTSEQIEELHQ
mDGAT2 KKFQKYIGFAPCIFHGRGLFSSDTWGLVPYSKPITTVVGEPI TVPKLEHPTQKDIDLYHA
. : . :*. * :*:***.* . :*:*** * * *****.***.* :* :***:***: *

mMGAT1 TYLEELKKLFNEHKGKYGIPHEHETLVFK
mDGAT2 MYMEALVKLFDNHKTKFGLPETEVLEVN
: * ***:*** *::*** *.* .:

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FIG. 10B



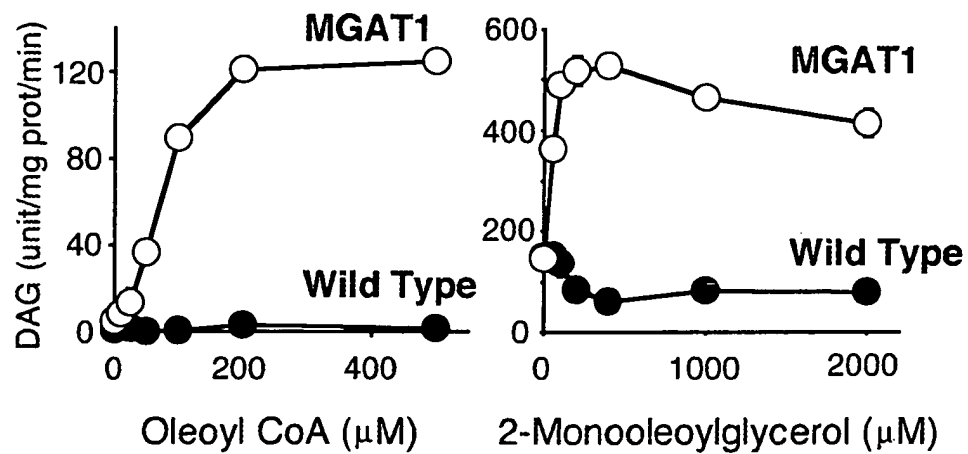


FIG. 11

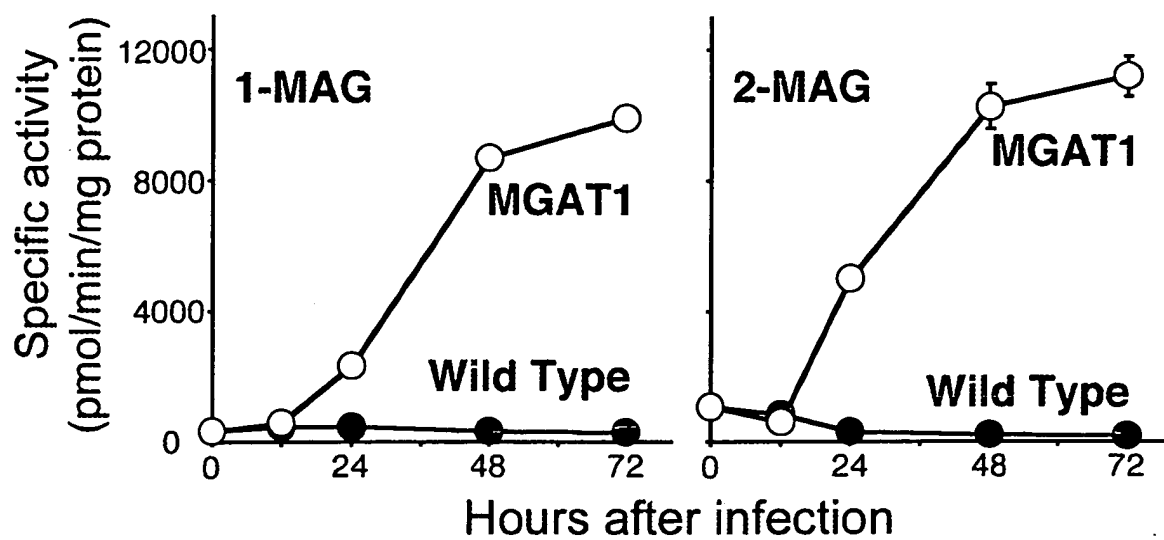


FIG. 12

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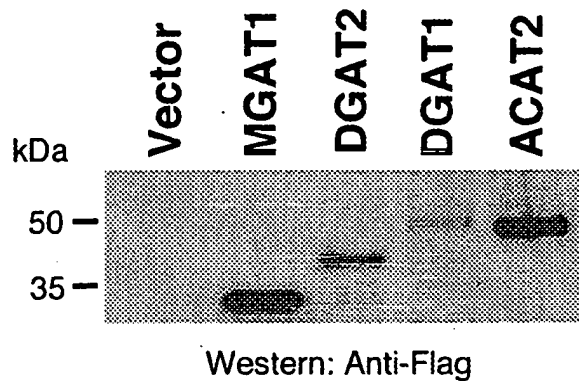
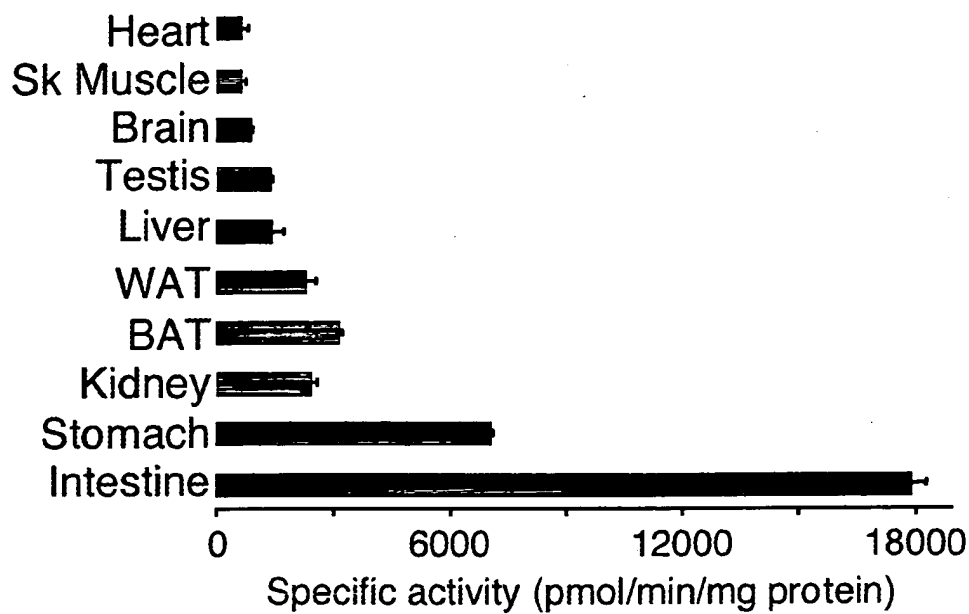


FIG. 13

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FIG. 14



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